IN THE SPECIFICATION:

Please amend the paragraph beginning at page 4, line 7, as follows.

The present invention allows permutation patterns to be discovered. In this disclosure, ~~the problem of discovering permutation patterns is formed as a discovery problem~~ ~~called the pattern problem and~~ techniques that automatically discover permutation patterns in, for instance, multiple input patterns are given. As there is generally not enough knowledge about forming an appropriate model to filter the meaningful from the apparently meaningless permutation patterns, a model-less approach is taken herein, which allows all permutation patterns that appear a number of times to be determined. Additionally, a notation is introduced for maximal permutation patterns that drastically reduces the number of valid cluster patterns, without any loss of information, making it easier to study the results from an application viewpoint.